



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,083	05/10/2001	Kenji Uchiyama	9319S-000204	5266
27572	7590	05/27/2004	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			RUDE, TIMOTHY L	
P.O. BOX 828			ART UNIT	PAPER NUMBER
BLOOMFIELD HILLS, MI 48303			2871	

DATE MAILED: 05/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .	Applicant(s)	
09/853,083	UCHIYAMA, KENJI	
Examiner	Art Unit	
Timothy L Rude	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 17 March 2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1,3,5-14 and 16-25 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) _____ is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) 1,3,5-14 and 16-25 are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 20040515, 20040517.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

DETAILED ACTION

Claims

Claims 1, 5, 9, 12, 14, and 23-25 are amended.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1, 3, and 5-13, drawn to a method of manufacturing comprising connection of terminal banks, classified in class 349, subclass 187.
- II. Claims 14 and 16-25, drawn to a mount base member or device comprised of said mount base member, classified in class 349, subclass 149.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case (2) the product(s) can be made by a method that does not require at least one of the plurality of first alignment marks and the

plurality of second alignment marks being formed on the corresponding one of the substrate and the mount base member in the same step that the corresponding one of the first terminal bank and the second terminal bank is produced (limitations added by most recent amendment).

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Invention I contains the following patentably distinct species of the claimed invention:

Species A, drawn to a method of manufacturing comprising connection of terminal banks wherein the mount base member is a member having a thickness within a range from 50 μm to 125 μm and a linear thermal expansion coefficient falling within a range from $2.5 \times 10^{-5}/\text{K}$ to a $2.6 \times 10^{-5}/\text{K}$ under a measurement temperature range from 100°C to 200°C, and wherein the pitch of the second terminal bank is 0.996 times to 0.997 times the pitch of the first terminal bank.

Species B, drawn to a method of manufacturing comprising connection of terminal banks wherein the mount base member is a member having a thickness within a range from 5 μm to 75 μm and a linear thermal

expansion coefficient falling within a range from $0.8 \times 10^{-5}/K$ to a $1.0 \times 10^{-5}/K$ under a measurement temperature range from $20^{\circ}C$ to $100^{\circ}C$, and wherein the pitch of the second terminal bank is approximately 0.998 times the pitch of the first terminal bank.

Invention II contains the following patentably distinct species of the claimed invention:

Species C, drawn to a mount base member or device comprised of said mount base member wherein the mount base member is a member having a thickness within a range from $50 \mu m$ to $125 \mu m$ and a linear thermal expansion coefficient falling within a range from $2.5 \times 10^{-5}/K$ to a $2.6 \times 10^{-5}/K$ under a measurement temperature range from $100^{\circ}C$ to $200^{\circ}C$, and wherein the pitch of the second terminal bank is 0.996 times to 0.997 times the pitch of the first terminal bank.

Species D, drawn to a mount base member or device comprised of said mount base member wherein the mount base member is a member having a thickness within a range from $5 \mu m$ to $75 \mu m$ and a linear thermal expansion coefficient falling within a range from $0.8 \times 10^{-5}/K$ to a $1.0 \times 10^{-5}/K$ under a measurement temperature range from $20^{\circ}C$ to $100^{\circ}C$, and

wherein the pitch of the second terminal bank is approximately 0.998 times the pitch of the first terminal bank.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, A or B of Invention I or C or D of Invention II for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 12 is generic to species A and B, and claim 23 is generic to species C and D.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over

the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy L Rude whose telephone number is (571) 272-2301. The examiner can normally be reached on Monday through Thursday.

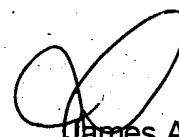
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H Kim can be reached on (571) 272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



tlr

Timothy L. Rude
Examiner
Art Unit 2871



James A. Dudek
Primary Examiner
Art Unit 2871